



## THE COMMONWEALTH OF MASSACHUSETTS

WATER RESOURCES COMMISSION  
100 CAMBRIDGE STREET, BOSTON MA 02114

---

### **Meeting Minutes for July 14, 2005**

#### **Members in Attendance:**

Kathleen Baskin	Designee, EOEA
Marilyn Contreas	Designee, DHCD
David Terry	Designee, DEP
Joan Kimball	Designee, DFG
Jonathan Yeo	Designee, DCR
David Rich	Public Member
Bob Zimmerman	Public Member

#### **Others in Attendance:**

Mike Gildesgame	DCR
Linda Hutchins	DCR
Michele Drury	DCR
Sara Cohen	DCR
Steve Garabedian	USGS
Vandana Rao	EOEA
Duane LeVangie	DEP
Kirk Shilts	Weir River Watershed Association
Philip Guerin	Mass Water Works Association
William Ward	Raynham Center Water District
Martha Stevenson	League of Women Voters of Mass
Susan Speers	Watershed Action Alliance
Kerry Mackin	IRWA
Emily Levin	IRWA
Frank Hartig	DCR
Margaret Callanan	EOEA
Eileen Simonson	WSCAC
Deirdre Menozo	ELM
Larry Bingaman	Aquarion Water Company
Joan Meschino	Select Board, Hull

---

Baskin opened the meeting saying that she was excited about the opportunity to be serving as the new Executive Director for the Commission and that she has been working with WRC staff on issues already. She knows many of the Commissioners and is looking forward to working with all of them, as well as with members of the public.

**Agenda Item #1: Executive Director's Report**

Hutchins provided an update on the hydrologic conditions:

- June was a warm and dry month, in contrast with May, which was a cold and wet month. A concern was that the coastal regions of Massachusetts got well below normal precipitation last month, whereas the western regions did better. This is the opposite of the conditions experienced in the month of May.
- Cape Cod got less than an inch of precipitation in June. This is something to watch in the coming months. The tourist industry is doing well, but the risk of forest fires on the Cape is elevated because of the dry conditions.
- In the long term, conditions look good, but precipitation levels in the western region and the Connecticut River region should still be monitored. There are thunderstorms predicted for this afternoon, into the weekend. The longer-term forecasts are not as optimistic. Through July 27<sup>th</sup>, above normal temperatures and below normal precipitation is expected.
- Ground water levels were generally in the normal range in June. They were above normal in the coastal regions and slightly below normal in western Massachusetts.
- Streamflow was above normal in the coastal regions and normal for the rest of the state. Streamflow and ground water trends appear fine in terms of any drought criteria. The graph depicting last the 45 days in Massachusetts shows that streamflow was close to normal in June. Streamflow reflects the precipitation events on July 6<sup>th</sup>. The streamflows for July 8<sup>th</sup> and 9<sup>th</sup> reflect the remnants of Tropical Storm Cindy. So far, for the month of July, precipitation is looking good.
- Reservoir levels were near normal or slightly above normal for the month.
- Fire danger levels have been low but they occasionally increase to moderate.
- Massachusetts is not listed in a drought condition in the National Drought Mitigation Center's map. The drought outlook through September does not forecast drought in Massachusetts.
- The hurricane season has begun in earnest. Hurricane Emily has formed in the Caribbean Sea, but it is forecast to head across the Gulf of Mexico. The forecast is for an intense and active hurricane season.

Baskin continued with the Executive Director's Report:

- There are three vacancies for public members on the Commission. One is to represent the agricultural interests; another is to replace Gary Clayton and a third to represent the ground water industry. A potential candidate for the agricultural representative has been interviewed. Baskin believes that this person will be recommended to become a Commissioner. EOEA is looking for candidates for the other two slots. She said that it was a high priority to fill these slots as quickly as possible and suggested that if anyone had suggestions for candidates, they contact her.
- Margaret Callanan, an attorney with EOEA was introduced. She will be joining Frank Hartig of DCR in providing legal support to the WRC and staff.
- Baskin stated that Gildesgame had suggested that there be a few minutes on each agenda for an "Open Forum" to discuss new business. This would be a good time to share information. Gildesgame said that this idea has been suggested before and welcomes input on any water resources related topic.
- Baskin said that Hutchins had offered to do a one-hour presentation on streamflow and stress conditions. This could be done prior to an upcoming meeting, perhaps as a lunch-time

seminar. Hutchins has given this presentation to the public and thought it might be of interest to the Commission. An announcement will be sent out once this is scheduled.

**Agenda Item #2: Vote – Meeting Minutes for April 2005**

A motion was made by Rich to approve the minutes for April 2005 and was seconded Contreas. The vote in favor was unanimous.

**Agenda Item #3: Vote – Water Needs Forecasts for Raynham Center Water District**

Drury acknowledged Bill Ward from the Raynham Water District and recapped the discussion from last month. Raynham Center Water District (RCWD) is one of two water districts in Raynham. RCWD serves 75% of the town's population, while the rest of the town is served by the North Raynham Water District (NRWD) or have private wells.

Raynham is in the Taunton River basin in Southeastern Massachusetts. This area has experienced quite a bit of growth, and therefore the district has requested revised water needs forecast. DEP has been working with Drury very closely on these projections and agrees that RCWD needs a new permit based on population growth.

RCWD has a very good water conservation program. It is 100% metered, including any public buildings within the district. They have an increasing block rate. Average residential gpcd is 69. The district is working with DEP on this and the WMA permit will address this issue. The WMA permit is for 0.82 mgd through 2010. RCWD water use has been above this, 0.96 mgd during 2004. This is attributed more to growth, rather than violations of the WMA.

Based on the most recent data, including population projections developed by Southeastern Regional Planning and Economic Development District (SRPEDD) and their conservation program and their current water use, it appears that by 2010 RCWD will need 1.12 mgd. This will increase incrementally until 2025, when they will need 1.29 mgd. DEP and DCR staff are satisfied with the District's water conservation program.

Drury said that last month there was a question about wastewater disposal. She reminded the Commission that it is discharged in-basin through the Taunton wastewater treatment plant, within the City of Taunton. The Water District is separate from the town-run sewer system and has no control over the wastewater. Last month, Dave DeLorenzo from DEP stated that both the town of Raynham and the city of Taunton were developing comprehensive water management plans, and DEP has been working with communities to facilitate cooperation.

Drury said that staff was requesting that the Commission approve the Water Needs Forecasts for the Raynham Center Water District.

Kimball asked about the methodology to calculate residential gpcd, as she had divided total water use by the town's total population. Drury replied that the 69 residential gpcd figure was an average over the last five years and that in order to calculate residential gpcd, the service population of the District and residential portion of its average day demand must be calculated. Overall gpcd may be higher. Kimball asked if safe yield was considered when determining

water needs. Drury replied that this is what DEP does under the WMA process, not as part of the water needs forecasting. The purpose for this approval is to make sure communities are in the WMA process so DEP can look at the safe yield of the system. Kimball said that she was impressed with RCWD's conservation program and asked about the difference between the summer and winter water use. She asked if this was considered in the methodology. Drury replied that this was not considered for overall Average Day Demand. DEP has been looking at this under the WMA process. LeVangie said summer to winter ratio for Raynham Center had been between 1.5 to 1.6. Kimball said that growth was premised on the fact that there would be more sewerage treatment capacity. Drury said that she did not think this was the case based on DeLorenzo's comments last month that most of the new sewerage was in the NRWD section of town.

Gildesgame said that water needs forecasts were just one part of the picture for these communities. It is intended to determine the amount of water needed for normal community water use. The other issues that have been raised here are dealt with in other programs.

Zimmerman said that the water needs forecasts have always been treated as an absolute cap for towns. Gildesgame said that this number could be modified under the WMA permit. LeVangie said that a permittee could return if the projection proves inadequate. Drury added that this is why RCWD is here now. The earlier projections from the early 90's were too low. Population has grown in a manner that had not been anticipated.

Mackin asked if the 65 gpcd goal and the goals for the summer/winter ratio were factored into the projections. Gildesgame said it depended on the type of community, but goals are not factored into to overall methodology. This is done under the WMA permit. Drury said that Raynham Center is a Method 1 community and under the WRC methodology, the cut-off for residential gpcd was 80. The demand projection will reflect the current gpcd. DEP will require reductions based on the stress level of the basin. Drury said the methodology was developed in 1993 and it has not changed. Gildesgame added that if the residential gpcd was lower than 80, this number was maintained into the future. If the use was higher than 80 gpcd, then the community would be required to reduce its consumption to less than 80 gpcd before WRC would approve an updated water needs projection.

Simonson said that it would be helpful to review the methodology at some point. She asked about the trends for Raynham Center's residential gpcd. She is also concerned that if the town's water use is limited, what is the build-out and what is the town doing about it. Drury replied that Staff had never used build-out analyses in their projections because this could be far out into the future. These projections only go out to 2025 and the permit will expire in 2010. She reminded the Commission that this is a water district, which is separate from the town. SRPEDD has been working with all communities in the region on build-out issues. As far as the residential gpcd trend, Drury said, it has been increasing slightly over the past few years. Staff has been working with DEP on this issue, and DEP will be addressing this in the WMA permit.

Simonson stated that she thought that water districts and water companies should be subject to the same kinds of restrictions as community water systems. She wants to eliminate sub-political entities within communities. This should be discussed and legislation should be proposed, she said. Baskin said that this should be a separate discussion at a future meeting. Rich added that

he ran a water district and all water supply regulations apply to all water suppliers – public, private or district. The only thing that doesn't apply is if there is an action which needs to be taken by the town or city. The district does not have the legal authority to mandate this action by the town or city. However, there is a requirement that the district or private company make a "best effort" to work with the community on this action. Simonson said that there should be state guidance on how each entity should work together. Baskin asked Simonson to frame some questions for the WRC to consider.

Zimmerman again asked where the wastewater was treated and discharged. Drury again replied that it was treated in the City of Taunton and discharged to the Taunton River. Zimmerman said that this water is withdrawn and "skips" a whole segment of the Forge River and Taunton River. He asked Kimball if more wastewater treatment was required. Kimball said Raynham had asked for waivers to expand the sewer system. Zimmerman asked if the approval of the projections could be conditioned so that any new wastewater goes back into the Zone III of the wells from where the water is withdrawn. Drury replied that she thought this would be more appropriate under a permitting process for wastewater. Zimmerman said now it is time to use permits to require that water not leave a subbasin. LeVangie said that DEP will be accepting public comments on its permits. Yeo said that this was a permit issue not related to these water needs forecasts. Zimmerman said that the WRC could write a letter to say that it thought this was a great idea and that water and wastewater infrastructure should be sustainable. Baskin said that this is something to consider when the permitting period is active. She looks at this document as representative of what the town needs, but not necessarily where the water will come from.

Drury said that Raynham Center was not looking for more sources. The location of the existing sources is known, but not how they will be managed. This is up to DEP and the Water District. It is more of a management issue. This is for the overall demand, rather than the supply side. Baskin said that this is based on population and if the water needs exceed the supply, it is not addressed here. This will be addressed somewhere else, where they will have to decide either to reduce growth or find new water. Drury agreed and said that supply could come from existing sources, conservation or water purchase, among other things. Kimball said that it would be good to hear how the WRC demand project process worked and how safe yield and stress classification are factored into the projections. Several Commissioners said that the DEP WMA process dealt with these issues, not the water needs forecasting process. Gildesgame reminded Kimball of the history of the water needs forecasting and WMA processes. DEP decided to use the WRC methodology in order to have consistency in the numbers used in the permits. WNFs are only one small piece of the WMA process. Baskin said that the projections do not determine where the water will come from.

Mackin said that where the water source is from a stressed basin, the Commission should use the residential gpcd standard for stressed basins to estimate residential water use and also apply the standard for DEP's summer to winter ratio. Gildesgame said this was more of a regulatory issue. The water needs forecast is based on the current methodology which includes estimates of conservation and unaccounted water reduction. Mackin suggested that the methodology be changed and Baskin said that this is something that may need to be considered. She said that there would be a presentation on water conservation standards later in this meeting. Baskin thought that assumptions of water use in the demand projections should agree with limits proposed by the MA Water Conservation Standards, but right now, this is the methodology in

use. Speers said that this is the reason the water policy task force was important. This has an effect on the community. LeVangie said that there is no equity in keeping communities at their current gpcd. The methodology should be looked at again. Kimball said that water needs forecasts might create expectations within a water supply that DEP will not allow. Gildesgame wasn't sure if the methodology could be manipulated to require that water suppliers be at 65 residential gpcd, but it was agreed that this would be investigated.

Zimmerman said he would approve the forecasts with the following conditions: that a letter from the WRC be sent to DEP recommending 65 gpcd in the residential water use and that any new wastewater be kept in the subbasin. Rich said he didn't mind sending the letter but he did not know how the Commission could make that a condition of the permit. Zimmerman said that it wouldn't be a condition of the permit, it would be a recommendation. Ward mentioned that Raynham owns a portion of the Taunton WWTP and he was not sure what the alternative options for wastewater disposal were. Zimmerman advised that Raynham not continue to do the wrong thing.

<b>V</b>	Zimmerman moved with a second by Terry to approve the water needs forecast for
<b>O</b>	Raynham Center Water District as presented in the Staff Recommendation, and that the
<b>T</b>	WRC send DEP a letter recommending that a requirement for 65 gpcd be included in any
<b>E</b>	new permit and that new wastewater be returned to the subbasin.
	The vote was 6 in favor and 1 opposed.

Terry asked Yeo why he opposed the motion and Yeo replied that he opposed the content of the letter that would be sent to DEP. He did not feel that the issue of wastewater discharge was within the realm of this vote on the water needs forecasts.

**Agenda Item #4: Vote – Staff Recommendation on the “Stress” Level of the Weir River**

Hutchins reminded the WRC that this had been discussed previously. She said that Riverways approached the WRC in April to request that the Weir River basin be designated as a high stress basin. In the 2001 WRC Stressed Basin report, the Weir River had been unassessed. There was not a USGS gage on the river with sufficient record to assess the stress level of this basin at that time. Subsequently, EOEA's Massachusetts Watershed Initiative contracted with GZA to develop a report regarding flow on the Weir River. This was overseen by OWR staff in the former DEM. An inflow-outflow analysis for six subbasins of the Weir River was conducted. This was the basis for the Riverways request. At the April meeting, staff was directed by the WRC to return to the WRC by July for a vote on the stress classification. A presentation was given to the WRC in June. A notice of this discussion and the July vote was placed in the May 25<sup>th</sup> issue of the Environmental Monitor, and water suppliers in the basin were notified. Written comments were not received in time to mail to the WRC, however the Aquarion Water Company submitted written comments this morning. They were emailed to Commission members, but may not have been received prior to the meeting. There were also letters of support from the Weir River Watershed Association and Watershed Action Alliance.

The stressed basin report allowed for unassessed basins to be stress-classified using a simple inflow/outflow analysis. A basin water budget is developed for the basin, considering the water transferred out of or into the basin and compared to the low flow statistics generated from the USGS Streamstats program. The criteria for stress classification are based on the net outflow for the basin compared to natural August median flow or 7Q10 flow for the river. The outflow from the Weir River basin is 2.98 mgd. Comparing this to the natural August median flow or 7Q10 flow for this river, it was determined that the Weir River basin could be classified as a high stress basin. There were additional biological data in the GZA report that supported this classification. Some areas of the river are dry during certain times of the year and the fish community consists of macrohabitat generalists, with no fluvial fish. The recommendation is that the whole basin be classified as highly stressed because the water balance is deficient along the length of the river. Aquarion Water Company and the town of Norwell have significant water withdrawals within the basin.

Baskin asked Aquarion's representative to comment. Bingaman introduced Meschino, Selectwoman from the Town of Hull, and Shilts, Hingham Water Supply Committee and Weir River Watershed Association. Aquarion is trying to work more closely with the Towns of Hingham and Hull, which it serves. Bingaman said that the letter submitted by Aquarion today had some technical comments. He understands that the WRC will be revising the stressed basin methodology, therefore, he suggested that the Weir River classification be put on hold until the new methodology is established. This would give Aquarion time to work with Hingham and Hull to understand what would need to be done from a public water supply standpoint, if the Weir River basin is classified as highly stressed. Aquarion understands that the WRC must protect the resource, but any decision made today would be based on a methodology that may be abandoned. It might be difficult to change the classification using the new methodology. Bingaman said it would make sense to make a decision on the methodology before making a decision on the classification. He suggested that the new methodology would be more scientifically based. He welcomes the opportunity to work with the WRC staff.

Zimmerman said that if the Staff Recommendation is approved today, it could be conditioned on reapplying the new methodology to the Weir River basin, once it is developed. He said that if the WRC does not accept the Staff Recommendation, the cost for waiting until a new methodology is developed would be placed on the environment. Baskin said that the reclassification methodology has not been developed yet, nor has it been initiated, so there would be a long lag time until something would be formally adopted by the WRC. Terry said that this vote will trigger a number of similar requests. Therefore he suggested that the WRC look at the process used to reclassify basins. He suggested as well that there should be a timeline developed for completing the new methodology. Baskin said that there was a process for developing the new methodology, but it was dependant on setting streamflow standards. There has been a break in the streamflow standards process because of insufficient staffing at DCR. She said that once the Geologist is on board, it will free up Hutchins to work on the streamflow standards, which in turn will facilitate development of the new stress classification methodology. Zimmerman suggested that a schedule be developed with input from staff and be presented to the WRC at a later meeting. Baskin asked if there was agreement that the current methodology outlined in the 2001 Stressed Basins report will be used until such time as the new methodology is developed and approved.

<b>M O T I O N</b>	Zimmerman moved with a second by Yeo to approve the Staff Recommendation to designate the Weir River as a highly stressed basin with the condition that when a new methodology for determining stress is completed by the WRC, then the calculations used for the current determination will be revisited.
----------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Discussion on the Motion:** Rich said that there were conflicting opinions on this methodology. He suggested that the current methodology was not close to solid science. He is concerned that this process could drag on for months and years before anything is resolved, but he is also concerned that the designation for the Weir River is being rushed and he is not comfortable that he could make an intelligent decision. He was also uncomfortable with the reason that the proponents from the Weir River Watershed Association gave for this designation which was concern about Aquarion's Free Street Well. Baskin asked what data Rich would need to be comfortable. Rich said he would like to see downstream gage readings and an analysis of how much impact the public water supply withdrawals have on streamflow.

Kimball said that the GZA report did an extensive study on the Weir River. She said that the net outflow is 2.6 times the August median flow. This is an extraordinarily stressed basin. The work is based on the methodology that the WRC supported. If the Commission does not approve the Staff Recommendation, the river will suffer. Zimmerman said that he did not have a problem with changing the Weir River's stress classification in the future, even if the new methodology demonstrated that the classification should be less stressed than what Staff is recommending today.

Terry said that he shared Rich's concerns about Commission decisions taking too much time, but he wasn't sure what would be gained by the suggestion not to vote using the current methodology. He said that it could be several years before a new methodology was in place. He then asked if the technical input (outside of the scope of the interim Stressed basin methodology) received today on this should be take into consideration. Zimmerman said the WRC should take advantage of any technical information received, but in this instance there is already a lot of technical information supporting this recommendation. Gildesgame said that Staff was confident on moving ahead with this because of the information in the GZA report and the interim methodology.

Terry asked if the information in Aquarion's letter would cause Staff to change its thinking. Hutchins said she had not done an exhaustive analysis on the information presented in Aquarion's letter, received just today. Terry said he was instructed to abstain from a vote if it is taken today because there had not been enough time to evaluate the information in the Aquarion letter. Hutchins said that Staff time could get bogged down in responding to additional information. Therefore, she said, we should stay with the simple methodology approved by the WRC in the Stressed Basins report. Otherwise, the new methodology would never be developed. Baskin said that there was good solid info supporting the reclassification that wasn't incorporated in the methodology. To change the methodology at this point would open up a whole new process that we are not ready for. Terry said that is why the Commission needs to think about the process. Zimmerman said that the motion is to revisit this under a new methodology. LeVangie said that he thought that all the basins would be revisited once the new



methodology was in place. Hutchins said this was true and Zimmerman added that stating that the Weir River would be revisited in the motion was insurance for Aquarion.

Mackin said that she was familiar with stressed subbasins and she said that the net loss of water in the Weir Basin was not a marginal situation. This basin was extremely stressed, she said. A new methodology that would provide some tweaking to the current analysis will not make a difference in this classification. The Stressed Basin Committee that was formed by the WRC developed a methodology. The WRC approved the methodology. Now the methodology is being used. She thinks that it would be disappointing if the WRC did not stand behind its own methodology. Aquarion's letter states that the methodology does not account for storage. She thinks this is incorrect. She does not think the Commission should delay the implementation of its own methodology.

Meschino said she came to the meeting today because these issues are becoming very important in the town of Hull. She said that Hull had not taken a position on the stress level of the basin. Her comments will reflect her own opinions. The town does support the Weir River estuary group, she added. She said that Hull is interested in being sustainable, but she has a responsibility to her town. She said that the WRC was not making a decision in the abstract. This decision will have immediate, direct and significant impacts to residents of these communities. Hull values the resources of the Weir River, but in a small town like Hull, there are limits to what can be accommodated. She said that the WRC had a responsibility to the citizens of the Commonwealth and there seemed to be a great deal of misconceptions about the processes and procedures, so she urged the WRC to "do it right."

Shilts said that no matter what the outcome of the vote today, Hingham and Hull would be working to solve their own problems in their own communities. He said that the WRC should give the towns guidance and expertise so they can make the best decisions for their citizens. He agreed that there would be impacts from this decision. He said the Board of Health in Hingham limits the amount of development because there is a deficient water supply. He said the towns look forward to working with the state to solve their problems. This is why the Watershed Association began working on the problem of stress in the Weir River basin a number of years ago. It was recognized that there are diminished streamflows in the river and that the fisheries composition is degraded. They've seen how the river has changed because of decreased streamflows. To suggest that this came about because of Aquarion's Well #4 is disingenuous, he said. The Watershed Association wants to improve its own environment. Shilts stated that Aquarion's letter contains some contradictions. He added that some of the discussion today implied that the methodology was new and unproven. This is not the case, he said, the methodology had been around for years. This is the first time it has been used. To state that it is new or not scientific enough is inaccurate. He said to hold off until the new methodology is in place is ridiculous. The towns need answers so they could move forward with solving problems and protecting the environment.

LeVangie said that there was not a pending permit decision that would be impacted by the vote today. Yeo asked what the implications would be of changing this classification from unassessed to highly stressed. LeVangie answered that the requirement for an unassessed basin was to have a residential gpcd of 80 and for a highly stressed basin, it was 65. Yeo asked Aquarion if they felt that the Free Street Well was not going to be approved. Bingaman

answered that the Secretary of Environmental Affairs is requiring an EIR for the well. Aquarion has put out an RFP for the EIR. They have not yet started drafting the EIR. But this is a concern, he said. The residential gpcd for the Aquarion system is 64. Unaccounted-for water has been reduced from the 20+% range to 14%. Aquarion is working hard to get the system in shape but, it is concerned about what will happen when new supplies are proposed to meet the projected demand. LeVangie said that DEP has been working with Aquarion on the Free Street source for several years. Regardless of the formal classification, DEP has always regarded this basin as being stressed. The vote today will not change how DEP treats the review process. What will change is the performance standards that will be included in the permit. Drury added that this well will be going through ITA review, so it will be subject to the same types of standards that all ITA proponents are subject to.

Meschino said that what is done today might be upended by the new methodology and if this is the case, the Commission could undermine its authority. Zimmerman said that this methodology had been developed by a group with wide-ranging interests. He did not think that the methodology was simplistic or ill-conceived. Baskin said that in the continuum of science and engineering, nowhere does one stop and say “that’s it, this is the answer.” We are always looking forward, always planning the next study, always looking to improve what is known. But we are also using what is available. This is the case here. There is a methodology in place that was vetted through a process. There are things that can improve the methodology, but a decision must be made to vote on this proposal. Kimball agreed with Baskin. She stated that an analysis of the seasonal withdrawals shows that in three out of four seasons, the river is stressed. People and the environment are not two separate things, she said. If rivers are lost, people are going to lose their water.

Guerin said that even though this methodology had been approved and is now in place, it should be recognized that it has a number of weaknesses and is overly simplistic. He said that there was new research on habitat and streamflow and he found it unsettling for the WRC to go forward and rule on stress classifications with a methodology that he thinks is overly simplistic. He said that the WRC shouldn’t be ruling on stress classification until the new methodology has been adopted. Gildesgame said that within a few years there would be a new methodology in place. And a few years after that, we may have new information to add to it; so, he said, referring to Baskin’s statement, at what point in that continuum of collecting data do we make a decision to use some methodology? Zimmerman added that all the studies that have been completed support the simple methodology that is now in place. Kimball said that the GZA did look at the habitat and their results show that there is habitat stress. This goes beyond the simple methodology. Baskin added that this is the type of information might be incorporated into a new methodology, but how this will happen has not been decided.

Simonson said that she hadn’t heard anyone saying that GZA did not do a decent job and that the information isn’t there. The group which developed the Stressed Basin report was highly technical. There was a lot of work and a lot of thought that went into the report and methodology. This does not make it perfect, she said, but she urged the WRC to consider that all people live in a basin and some of them are unclassified. Everyone is already living with the restrictions or lack of restrictions that go along with the classifications. The opportunity to reclassify gives a chance to determine where the methodology needs improvement and where it could be made better in the future. She said that from this discussion, it sounds like the Weir

River is a stressed basin that was left unclassified in the original report. Clearly rivers that stop flowing have problems, she said.

Speers said that the big issue is to support the WRC-approved process. The GZA report has been public for some time. It is the information, funded by the tax-payers, available to the WRC. It has been on the record and accepted by the State. There is a process to do what has been requested. It is inappropriate not to vote at this time. The data available now meets the WRC's own test.

Shilts said that he was speaking now as a member of the Hingham Board of Health, the secretary of the Comprehensive Wastewater Management Plan being developed in Hingham and secretary of the Water Supply Committee. Hingham is looking forward to receiving direction from the WRC. The Board of Health is considering enacting by-laws to regulate private well usage. The Water Supply Committee is looking at additional supplies with Aquarion and considering taking back control of the water supply from Aquarion. On the wastewater side, Hingham is waiting to hear from DEP where to go to meet are future wastewater needs. This decision today will help determine that. From the town's perspective, we need an answer on this today. Speaking as a member of the Weir River Watershed Association, he went on, we want the WRC to give the designation. Unassessed is unacceptable, he said.

Hutchins gave a summary of the GZA report. The basic conclusion was that in three out of four seasons, the withdrawals cause an excessive loss of streamflow for aquatic habitat. A lot of the water is exported out of basin, as well.

<b>V O T E</b>	Gildesgame reread the motion: To approve the Staff Recommendation designating the Weir River as highly stressed with the condition that if and when a new methodology is developed, the calculations be reworked for the Weir River.
	The motion passed with a vote of five in favor, one opposed, and one abstention.

The Commission took a two-minute break.

**Agenda Item #5: Presentation on the Water Conservation Standards Task Force**

Baskin introduced Monnelly and said that the revised Water Conservation Standards were nearly complete. It was expected that the WRC would receive a copy of the revisions within the next few months. Monnelly said that she wanted to update the WRC on the process used to review and revise the standards and the timeline the subcommittee has been working under. Since some commissioners had left, she said that she would email the presentation to those who were absent.

The hope is to present the WRC with a draft of the revised standards in September or October. This effort came about as a result of a recommendation from EOEA's 2004 water policy to revise the Water Conservation Standards to consider new water-conserving technology that had been developed since the standards were first promulgated and to look at improving consistency across state programs for water resources, and to incorporate the Lawn and Landscaping standards which were adopted by the WRC in 2002 as an amendment to the Water Conservation

Standards and, finally, to look at the issue of stressed basins to determine if this should be tied to the Water Conservation Standards.

The Water Conservation Task Force was drawn from state agencies and representatives from Mass Audubon, the Environmental Business Council, Mass Water Works Association (MWWA), the Clean Water Council and MWRA. This group met six times between February and June 2005. In addition, the Task Force has met with other groups, including the Instream Flow Task Force, WSCAC, regional planning agencies, the Massachusetts Municipal Association, Riverways and Amy Vickers. The Task Force is continuing to seek input from individuals and groups that are interested in this topic.

The process began with a review of the existing standards. Monnelly noted that although the Standards are 13 years old, they are comprehensive and were ahead of their time in 1992. There is a lot of good information in these Standards. The Standards were reviewed to determine what to keep, what to remove, what to add. In addition, recently developed performance standards and policies were reviewed, including the ITA Performance Standards, which include 13 water conservation standards and the WMA Policy. Finally, data needs were examined. This includes review of the Annual Statistical Reports (ASRs) and development of an action plan to gather better data.

Monnelly reviewed the references used by the Task Force:

Manuals and Handbooks

Handbook of Water Use and Conservation, Vickers 2001  
Drought Management Planning, AWWA 1992

Tips and Guidance

2005 Greenscapes Reference Guide, North and South River Watershed Association  
A Homeowner's Guide to Environmentally Friendly Lawn care, DAR 1997  
Guide to Lawn and Landscape Water Conservation, WRC 2002  
More than Just a Yard, EOEA 2004  
Outdoor Water Conservation, MWRA 2005

Databases

Public Water Supply Annual Statistical Reports, 1999, 2002, 2003, MA DEP

The intention was to use existing documents that have been approved by key groups, such as MWWA and DEP. In addition, some studies from across the country were reviewed in order to define efficient water use, both indoor and outdoor. Wastewater flow was also studied as another measure of indoor water use. There were many excellent references developed by the state and others which define efficient outdoor water use. The key studies:

- North American Residential End Use Study, AWWA 1998
- Residential End Uses of Water Study, AWWA 1999
- Seattle Home Water Conservation Study, US EPA 2000
- 2004 Massachusetts Water Survey, Tighe and Bond 2004
- Technical Evaluation- Title 5, DeFeo, Wait and Associates for MA DEP

Lastly, water use data from the ASRs was reviewed. These reports have limitations, but the Task Force focused on those communities that were felt to have more accurate reporting. This process is on-going, and DEP staff has been assisting. Monnelly discussed the outline the Task Force is using and highlighted the changes from the 1992 standards. A section on comprehensive planning has been added. Statements that discuss inflow-outflow and stormwater may be added, to move away from just simply emphasizing drinking water. There is an emphasis on water audits as an important first step to determine where to focus conservation efforts. The metering and pricing sections are similar, with minor changes. The residential section has added a focus on efficient appliances (washing machines and dishwashers). The ultimate goal is to have a standard that is consistent with the ITA Performance Standards and the WMA policy. The public water use section is similar, with the addition of ties to the goals of the state sustainability plan. To develop the industrial and commercial section, Task Force members have been meeting with the Office of Technical Assistance, to develop some measurable guidelines to reduce water use in this category. A section on agricultural water use has been added. It is being drafted by the Department of Agricultural Resources, with input from their stakeholders. The lawn and landscape standards have been included as they were approved by the WRC, but some more details from the WRC's lawn and landscape guidance document have been added in the recommendations.

In added to the text of the standards, there are appendices. These include standardized methodologies for water audits, etc. Some educational outreach material may also be included here. Model by-laws are being collected for the appendices and a section on private wells and water use restrictions may be included. The definitions from the 1992 Standards will be kept.

In terms of next steps, a draft will be presented to the WRC in September, followed by public hearings. A final document is targeted for December 2005 and then an implementation plan will continue into 2006.

Simonson asked about communities which have different types of water supply sources (i.e. reservoirs and wells). She suggested that something should be added about system management. In terms of large user audits, Simonson said that there was a huge drop in industrial water use in Massachusetts. The large users are now "150-200 seat restaurants, laundramats," etc. These users should "buddy up" so that a large company assists a smaller company with water conservation. This would save money for the small company and give the big company "a lot of free good press." She hopes that when benchmarks are applied, the different characteristics for different communities are taken into account. By this she said she meant, for instance, that communities with reservoir systems which have storage capacity should incorporate by-laws which require the highest efficiency appliances possible as mitigation for the summer water use, if they want to use water outdoors seasonally.

Yeo suggested that another section of the Water Policy may cover the issue of flexibility in water systems. LeVangie said that this was the Water Supply Optimization recommendation. Yeo continued that this section would have links to the comprehensive planning aspect of the water conservation standards. Baskin said that the comprehensive planning section refers to other areas where planning resources could be found. She suggested inserting a paragraph into this section referring to Water Supply Optimization.

Garabedian asked if the Water Conservation Standards Task Force would be recommending an update of the ASRs. Monnelly said yes. Terry said that DEP has been meeting with MWWA. They are interested in updating the ASRs as well. They want to see accurate reporting, good guidance, and good definitions for these reports. He suggested that Monnelly discuss this further with DEP. Garabedian said that USGS supports this effort. Baskin welcomed USGS's suggestions on the Water Conservation Standards. Garabedian said that the ASRs are necessary to conduct water resources modeling. LeVangie suggested that someone from USGS be included in the discussions on revising the ASRs. Gildesgame emphasized that there will be public input into the Water Conservation Standards. Once the Task Force develops the recommendations, the availability will be noted in the Environmental Monitor. The members of the Task Force should also be distributing the draft revised standards to their constituencies.

Meeting adjourned.